

2009 CONSUMER CONFIDENCE REPORT (CCR) CHECKLIST

This checklist is provided as a guidance tool to check the basic required elements in your annual CCR (Water Quality Report). It is not all inclusive. The manager of the water system is responsible for producing a CCR that meets the requirements of DWS Rule 1200-5-1-.35. If you have questions concerning your CCR, please call the Division of Water Supply staff at the field office (888-891-8332) or Wayne Muirhead at the Central Office (615-253-4067). TAUD also provides CCR assistance.

The following elements should be included in the CCR.

1. Source of water
 - A. Type of Water (e.g., surface water, groundwater)
 - B. Common Name (e.g., 5 deep wells that pump water from the Memphis Sands Aquifer, the Duck River)
 - C. Availability of a source water assessment and a brief summary of the system's susceptibility to potential sources of contamination
 - D. A wellhead protection plan may be described if applicable
2. Required Additional Information (paragraph A must be included, and section B or comparable language must be included)
 - A. *Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline at (800-426-4791).*
 - B. *The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.*

Contaminants that may be present in source water:

 - *Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.*
 - *Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban stormwater runoff, industrial, or domestic wastewater discharges, oil and gas production, mining, or farming.*
 - *Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.*
 - *Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.*
 - *Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.*

In order to ensure that tap water is safe to drink, EPA and the Tennessee Department of Environment and Conservation prescribe regulations which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

3. Required Additional Health Information

- A. The following paragraph about the vulnerability of some populations to contaminants in drinking water must be in the CCR:

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline at (800-426-4791).

- B. **The informational statement about lead in drinking water must be in the CCR:**

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. [NAME OF UTILITY] is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>

- C. **(Note: Paragraph 3(C) applies only to Ground Water Systems or Systems that purchase ground water.)** Any ground water system must inform its customers of any fecal indicator-positive ground water source samples or any significant deficiency that is uncorrected at the time of the CCR. The CCR must include the following elements:

- i. The nature of the particular significant deficiency or the source of the fecal contamination (if known) and the date the significant deficiency was identified by DWS or the dates of the fecal indicator-positive ground water source samples;
- ii. Explain how the fecal contamination in the ground water source has been addressed under Rule 1200-05-01-.40(4) and the date of such action;
- iii. For each significant deficiency or fecal contamination in the ground water source that has not been addressed under Rule 1200-05-01-.40(4), give the approved plan and schedule for correction, including interim measures, progress to date, and any interim measures completed;
- iv. If the system receives notice of a fecal indicator-positive ground water source sample, the potential health effects language must be included, *“Fecal indicators are microbes whose presence indicates that the water may be contaminated with human or animal wastes. Microbes in these wastes can cause short-term health effects such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a special health risk for infants, young children, some of the elderly, and people with severely compromised immune systems.”*

4. Information for non-English speaking populations.

If your community has a significant non-English speaking population the CCR shall provide information in the language of the non-English speaking population. (e.g., *Este*

informe contiene información muy importante. Tradúscalo o hable con alguien que lo entienda bien.)

5. Information on Public Participation.

The water system shall provide a statement on opportunities for public participation. (e.g., *Our Water Board meets at 7 pm at City Hall on the last Thursday of every month. Please feel free to participate in these meetings.*)

6. Name and phone number of the water system's main contact person. (e.g., *For more information about your drinking water, please contact John Smith at 123-4567.*)

7. Table of detected regulated and unregulated contaminants.

- A. Include contaminants subject to an MCL, MRDL, Action Level (AL) or Treatment Technique (TT). Express all numerical values as numbers equal to or greater than 1.0. Express MCLG in same units as MCL.
- B. Include sample results for calendar year 2009. If a contaminant is monitored less than annually, then give the most recent monitoring results and the year of monitoring (do not go back more than 5 years).
- C. List in the table the likely sources of detected contaminants from Appendix A of the CCR Rule 1200-5-1-.35.
- D. Listing chemical data in the table:
 - i. For regulated detected contaminants, give the highest level detected and range (lowest value to highest value).
 - ii. For unregulated contaminants, give the average of values detected and range (lowest value to highest value).
 - iii. For contaminants with compliance based on a Running Annual Average (e.g., TTHMs and HAA5s) give the highest RAA calculated during the year for the "Level Detected" and give the range of individual values for the year. (**Note—if you took standard monitoring samples for the Stage 2 DBP IDSE requirements in 2009, include these TTHM and HAA5 samples when you determine your high and low values for the "Range".**)
- E. Turbidity, if applicable.
 - i. Give the highest single measurement (e.g., *.90 in "level detected" column, .06-.90 in "range" column*)
 - ii. Give the lowest monthly percentage of samples meeting the turbidity limits as a footnote (e.g., *We met the treatment technique for turbidity with 98% of monthly samples below the turbidity limit of 0.3 NTU.*)
 - iii. Include an explanation of the reasons for measuring turbidity (e.g. *Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system.*)
- F. Total Organic Carbon, if applicable. Report the percent removal achieved for the "Level Found" and specify the percent removal required for the treatment technique level, e.g., 40% removal (35% required). Alternatively, add a footnote to the Total Organic Carbon (TOC)* in the table as follows, *"*We met the Treatment Technique requirement for Total Organic Carbon in 2009."*
- G. Lead and Copper.
 - i. Give the 90th percentile values for the most recent round of sampling, e.g., 90th% = 4.3.
 - ii. Footnote the number of sample sites exceeding the action level (e.g., **During the most recent round of lead and copper testing, 0 out of 20 households sampled contained concentrations exceeding the action level.*)

- iii. Give the health effects language if the action level was exceeded.
 - H. Microbial Contaminants.
 - i. If you collect <40 samples per month, give the highest monthly # of positive samples.
 - ii. If you collect at least 40 samples per month, give the highest monthly percentage of positive samples.
 - iii. Give the total number of fecal or E.Coli positive samples if applicable.
 - iv. If you are a ground water system and had a fecal indicator-positive ground water source sample, list the number of positive fecal indicator samples in the contaminant table.
 - I. Cryptosporidium, if applicable.
 - i. Give a summary of the results of the monitoring.
 - ii. Give an explanation on the significance if you had positive results (e.g.,
Cryptosporidium is a microbial parasite which is found in surface water throughout the U.S. Although Cryptosporidium can be removed by filtration, the most commonly used filtration methods cannot guarantee 100 percent removal. Monitoring of our source water indicated the presence of cryptosporidium in X out of X samples tested. Symptoms of infection include nausea, diarrhea, and abdominal cramps. Most healthy individuals are able to overcome the disease within a few weeks. However, immuno-compromised people have more difficulty and are at greater risk of developing severe, life threatening illness. Immuno-compromised individuals are encouraged to consult their doctor regarding appropriate precautions to take to prevent infection. For more information on Cryptosporidium, contact the Safe Drinking Water Hotline (800-426-4791).
 - J. Radon if present in finished water.
 - i. Give a summary of the results of the monitoring.
 - ii. Give an explanation of the significance of the results.
 - K. Sodium. Give level detected.
 - L. ***The table must clearly indicate violations of MCL, TT or AL***
 - M. Results of contaminants not detected should not be listed in the CCR.
 - N. Results of voluntary monitoring should be placed in a separate table.
8. Informational Statements on arsenic, nitrate, and total trihalomethanes if applicable.
- A. Arsenic. If arsenic is detected >0.005 mg/L but \leq 0.010 mg/L, you must include:
While your drinking water meets EPA's standards for arsenic, it does contain low levels of arsenic. EPA's standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. EPA continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.
 - B. Nitrate. If nitrate is detected >5 mg/L but below the MCL, you must include:
Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant you should ask advice from your health care provider.
 - C. Total Trihalomethanes. Systems that detect any individual values of total trihalomethanes (TTHM) greater than 0.080 mg/L must include the health effects language for TTHMs:
Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.

9. Compliance with National Primary Drinking Water Regulations (NPDWR).
 - A. **Report any violation that occurred during the year and give a clear and readily understandable explanation of the violation, any potential adverse health effects (mandatory language), and actions taken by the system to address the violation.**
 - B. **Include monitoring or reporting violations.**
 - C. Filtration or disinfection violations shall include the following language: *Inadequately treated water may contain disease-causing organisms. These organisms include bacteria, viruses, and parasites which can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.*
10. Variances and Exemptions. If operating under the terms of a variance or exemption, explain the reasons for the variance or exemption, date issued, status report, and opportunity for public input in the next review.
11. Definitions. Define only the abbreviations or acronyms used in the CCR.
 - A. MCL - Maximum Contaminant Level, or the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.
 - B. MCLG - Maximum Contaminant Level Goal, or the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.
 - C. MRDL - Maximum Residual Disinfectant Level, or the highest level of disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for the control of microbial contaminants.
 - D. MRDLG - Maximum Residual Disinfectant Level Goal, or the level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.
 - E. AL - Action Level, or the concentration of a contaminant which, when exceeded, triggers treatment or other requirements which a water system must follow.
 - F. TT - Treatment Technique, or a required process intended to reduce the level of a contaminant in drinking water.
 - G. BDL – Below Detection Limit.
 - H. Units of Measure – Give definitions for any units of measure used in the CCR:
 - i. Ppm or mg/L—Parts per million or milligrams per liter, explained in terms of money as one penny in \$10,000
 - ii. ppb or micrograms/L—Parts per billion or micrograms per liter, explained in terms of money as one penny in \$10,000,000
 - iii. pCi/L (picocuries per liter)
 - iv. NTU—Nephelometric Turbidity Units—Turbidity is a measure of the clarity of the water. Turbidity in excess of 5 NTUs is just noticeable to the average person
12. Report Delivery and Record Keeping
 - A. Have 3 staff members proofread the entire CCR to check for errors before printing or delivering to the newspaper.
 - B. Send a copy of the CCR to TN DWS and deliver to all customers by July 1 every year.
 - C. Send a copy of the CCR Certification form to TN DWS by October 1 every year. (DWS recommends you send the Certification form to DWS with the CCR by July 1.)
 - D. Wholesale systems must send a copy of their CCR Water Quality Data to purchasing systems by April 1 every year.
 - E. Water systems must make a “good-faith” effort to reach non-bill paying customers.

- i. Give a list of agencies the CCR was distributed to (e.g., apartments, factories, nursing homes, etc.)
 - ii. List where copies may be viewed by the public (e.g., libraries, city hall, water utility office)
 - iii. List media that gave an announcement on the release of the CCR. (TV, Radio)
- F. Water Systems serving >100,000 people shall post the CCR on their Website.
- G. Water Systems serving <10,000 persons may use the local newspaper to meet the CCR delivery requirements as follows:
 - i. Systems shall publish a pre-notification in the newspaper and/or the utility bill containing the following information:
 - a. **The CCR will not be mailed to each customer.**
 - b. **The CCR will be printed in the [NAME OF NEWSPAPER] on [GIVE DATE].**
 - c. **Call [GIVE PHONE #] to request a copy of the CCR.**
 - ii. Publish the CCR in the local newspaper.
- H. Water Systems serving <500 persons may meet the CCR delivery requirements by providing notice by mail, hand delivery, or another method such as posting a notice in an appropriate location (e.g., laundry room, mail room). This notice shall inform the customers that the CCR is available upon request from the main office or system manager.
- I. Water systems shall retain copies of their CCRs for no less than 3 years.